

# **PAINE FLUSH DOORS**



## ◀ **HOLLOW CORE DOORS**

Manufactured since 1935.  
Over 7,000,000 satisfactory  
installations throughout  
the world.

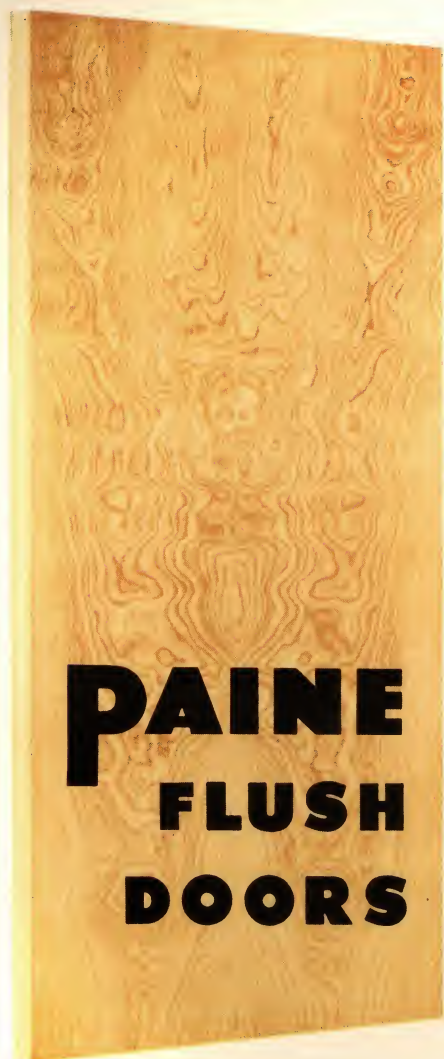
## **PAINE**

## ◀ **SOLID CORE DOORS**

Made by America's pioneer  
solid core flush door  
manufacturer. Backed by over  
a century of experience.

**PAINE**  
LUMBER COMPANY, LTD.  
ESTABLISHED 1853 • OSHKOSH, WIS.





# **PAINÉ FLUSH DOORS**

For over 100 years the Paine Lumber Company has been building a reputation based on foresight and fine workmanship. These qualities, applied to the manufacture of Flush Doors, date back to the 1880's when this company assumed its leadership in the production of doors. Hardwood, veneered solid core flush doors came into being at the turn of the century and have been manufactured consistently since then; hollow core doors were tested and patented as far back as 1910. The famed REZO hollow core door had its inception in the early '30's, was market tested in 1935 and now has given outstanding service in over seven million installations of all types and in all places.

Paine Lumber Company has set the pace in the manufacture of doors. This is indicated by the fact that it holds all the gold medals ever awarded the door industry by any national or international exposition held in the United States.

## **HOLLOW CORE**

Paine REZO hollow core flush doors are well known for their high quality and precise workmanship. This is the result of absolute quality control within the Paine factory plus the tradition for expert craftsmanship passed down from generation to generation of Paine factory families.

## **FACING**

In order to reach their high standard of appearance, plywood face panels used on Paine flush doors are completely fabricated from raw materials to finished product within the Paine plant under the watchful eyes of experienced craftsmen.

## **SOLID CORE**

Solid core flush doors have been made by Paine for over fifty years. Because of their consistent high quality and excellent service, millions of these doors have been specified by architects for use in public buildings.

## **Guarantee**

We, of Paine, are proud of our world-wide reputation for manufacturing quality products. They are backed by more than 100 years of woodworking experience, by a tradition of product pride that has been passed down through generations of Paine craftsmen. We will never knowingly jeopardize our reputation and position of leadership in the door manufacturing industry. Each door is built to rigid standards of quality, workmanship and inspection. If, through human error, an imperfect door is shipped for installation, we will gladly replace it, provided it has not been subjected to abuse in shipping, storage or installation, over which we have no control after it leaves our factory.

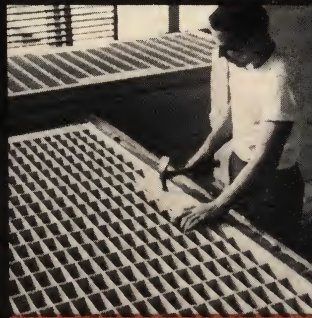




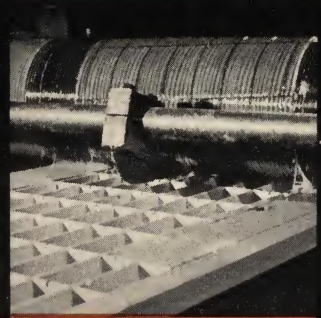
Gridwork must be assembled in a skilled hand operation.



Stiles and rails are each securely locked into place.



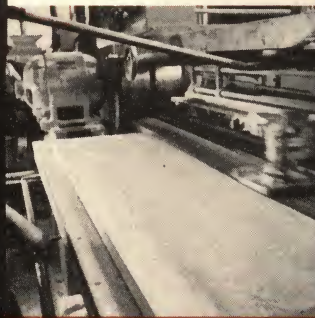
Lock areas are formed by inserting softwood blocks.



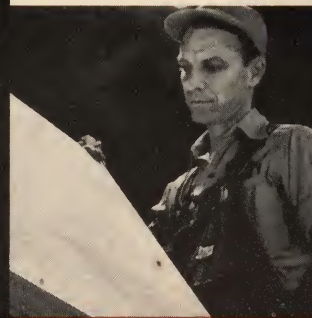
A complete coating of resin glue is applied by machine.



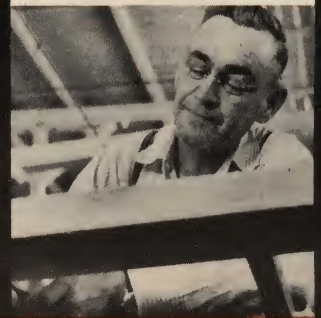
Face veneers are matched for pleasing appearance.



Completed doors are sanded to a cabinetmaker's finish.



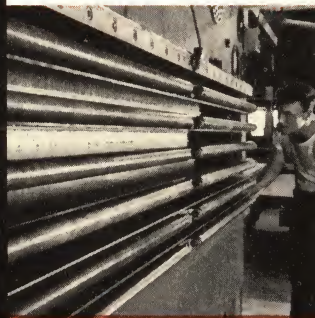
Each door must be carefully inspected in oblique light.



Special doors are handled by experienced craftsmen.



Solid core is carefully prepared for durable glue bond.



Controlled heat and pressure provide accurate assembly.



The REZO core is hand-assembled using finely machined softwood strips interlocked from alternate sides. Here is one of the important reasons for the greater strength, versatility and custom-built excellence of the Paine REZO door.

## TYPES OF DOORS

### **REZO** HOLLOW CORE.....4, 5, 6

Interior .....4

Cutaway layout  
Construction details  
Advantages

Exterior .....5

Cutaway layout  
Construction details  
Advantages

Institutional .....6

Cutaway layout  
Construction details  
Advantages

### **PAINE** SOLID CORE.....7

Cutaway layout  
Construction details  
Advantages

### **PAINE** SPECIAL DOORS.....7



## INTERIOR DOORS

The Paine REZO interior door is much lighter than any other door of its strength, far stronger than any other door of its weight. This means exceptional resistance to abuse and the ability to withstand the stresses and strains imposed by temperature and humidity changes—all adding up to trouble-free performance.

### ADVANTAGES

#### Dimensionally stable

Through careful engineering, the core of the door is designed to "breathe" through a series of notches and grooves. This allows rapid stabilization of moisture content throughout the entire door keeping it flat and straight during all seasons of the year.

#### Light Weight

Fine tolerance machining of the grid-work parts, designed to interlock and form a network of ventilated air cells, provides a completely integrated core, light in weight and reinforced with the rigid strength of edge grain wood.

#### Resists abuse

With a combination of rigid strength and light weight, plus carefully designed gridwork spacing, the REZO door is built to resist all types of abuse. Low "impact resistance" permits easy operation and prolongs the life of the door under all conditions—in the home or in public buildings.



3" (nom.) top and bottom rails are of sufficient width to permit cutting down 2" in height—cut equally from each end.

Notches and grooves provide ventilation for every core cell, permitting rapid equalization of moisture content for perfect stability.

The air cells formed by interlocked strips of finely machined softwood are 2" x 4" in the standard interior door.

Lock area, both sides, set in the middle is 4 3/8" (incl. stile) x 20" on 6' 8" doors; proportionately longer on doors over 6' 8" high.

Core is overlaid with plywood 1/8" thick before sanding. Face veneers on all grade "A" doors are hand-matched for pleasing appearance.

Stile width 1 1/2" (nom.). Door thickness can be 1 3/8" to 2 1/4". When specified, matching vertical edge strips finish not less than 1/2" wide.

Interior door layout.

### CONSTRUCTION DETAILS

#### Exterior Sash Doors

Metal saddles are used at the bottom of light openings exposing a flat surface. Other openings are properly primed with lead and oil.



#### Interior Sash Doors



Light openings on the standard interior door are framed into the core and come complete with flush glass stops.

#### Mirror Doors



Our stock two member mirror moulding is recommended for the installation of mirrors on standard interior doors.

#### Louver Doors



Metal louver installation.



Stock wood louver design.



## EXTERIOR DOORS

Both research and experience have encouraged the development of the REZO hollow core entrance door. Over a half million satisfactory installations give testimony to the fact that the properly designed and well manufactured REZO hollow core entrance door is the best door.

### ADVANTAGES

#### Dimensional Stability

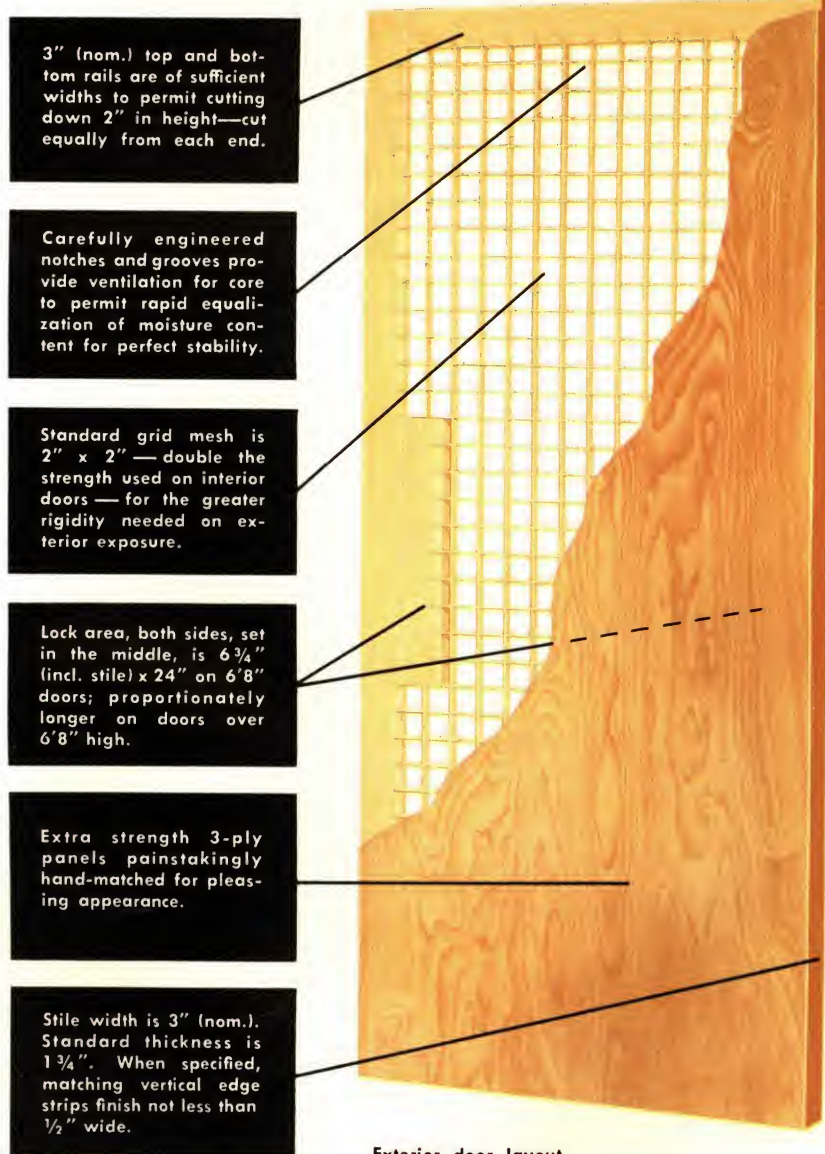
The doubly reinforced grid core of edge grain wood slats mortised into an extra strong framework of stiles, rails and lock blocks and covered with the finest exterior grade plywood panels are combined to produce a door that will not swell, shrink or sag and will be highly resistant to warping under any weather conditions.

#### Beauty

REZO entrance doors are available with any commercially available species of face veneer. The warmth and interest of a broad expanse of hand-matched natural wood is unsurpassed in developing an entrance-way which is built to give satisfaction. Because Mahogany and Brown Ash resist weather best, they are particularly recommended for entrance doors.

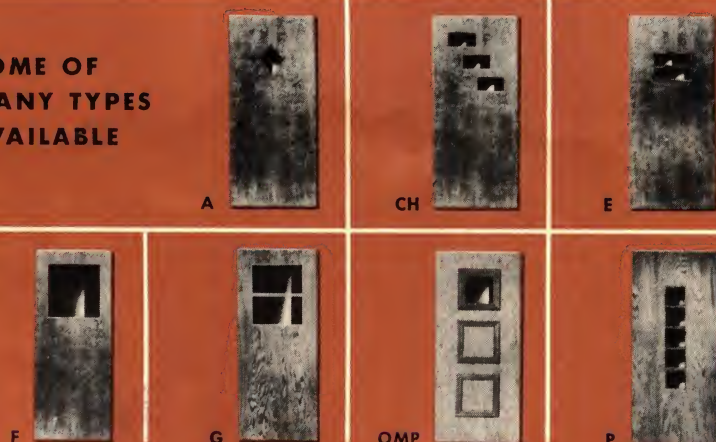
#### Lifetime Service

Precise engineering and correct manufacturing, backed by a record of performance established through more than 20 years of service, assure an installation which can be expected to give a lifetime of trouble-free service.



Exterior door layout

### SOME OF MANY TYPES AVAILABLE



Standard entrance door designs are available in a wide variety to satisfy most requirements where economy is a factor. Special designs to achieve any effect can be custom built to meet the needs of the most discriminating designer. It is true that Paine craftsmen can produce any design or pattern — that the treatment of the flush surface is limited only by the imagination.



## INSTITUTIONAL DOORS

The REZO institutional door is designed to provide a door for public buildings with the strength, lightness in weight and lower "impact resistance" of the hollow core door and the general utility of the solid core door—and at a lower price. It is completely blocked to receive the majority of special hardware and can be specified by name—"REZO institutional," eliminating the need for a detailed description of extra blocking. Other than standard blocking can be furnished when specified.

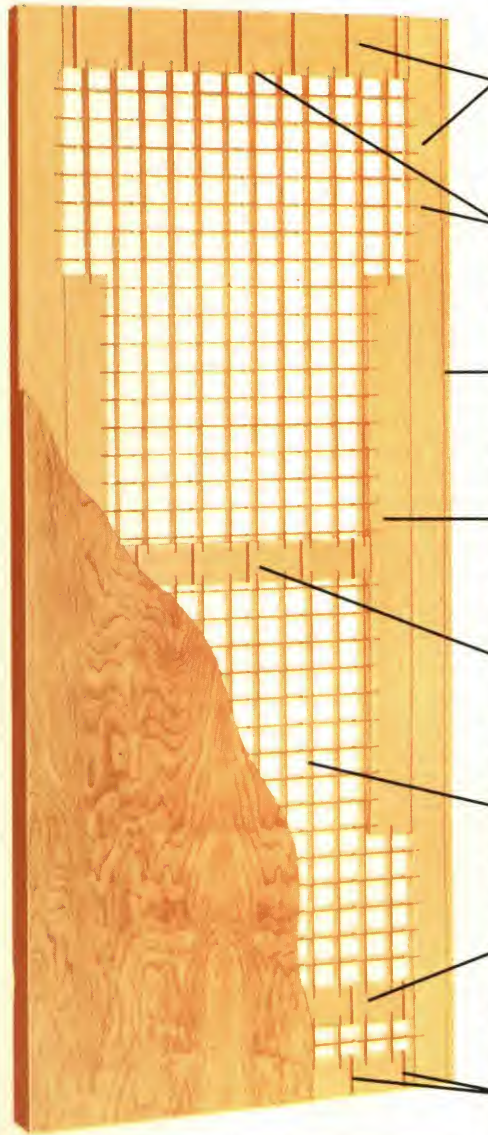
### ADVANTAGES

#### Rugged Strength

The combination of heavy framework, 2" x 2" grid mesh, extra cross rails and three ply hardwood face panels produces a door exceptionally resistant to abuse. The fully ventilated core helps insure the dimensional stability under conditions of changing temperature and humidity.

#### Light Weight

Because it weighs only half as much as a solid core door of its size, two important factors are accomplished: easy, one man installation and long, trouble-free service. Where a door is subjected to abnormal, hard abuse, the REZO institutional door is outstanding—"low impact resistance" is the answer; for example, lower inertia due to lightness in weight when struck by a loaded cart permits the door to open quicker and easier, reducing destructive impact shock on both the door and equipment.



Institutional Door Layout

One rail is 5" wide and can be used as either top or bottom of the door. Stiles are 3" (nom.).

Gridwork is locked into the stiles and rails for greater strength.

Matching vertical edge strips can be furnished and finish not less than 1/2" wide after trimming.

Lock area is 6 3/4" wide and 21" from either end and varies in length proportionate to door height.

3" rail for special hardware is 41" from bottom of door to top of rail unless otherwise specified.

Heavy duty 2" x 2" air cell gridwork interlocked for strength and durability.

3" rail for kick plate located 10" from bottom of door to top of rail unless otherwise specified.

Vent grooves in top and bottom rails help keep moisture content in balance—prevent warpage.



Light Weight—easy, one man installation



Resists Abuse—low "impact resistance"



Convenient—easy to open and close



## PAINE SOLID CORE DOORS

Building code requirements continue to demand solid wood doors for entrance, corridor and certain other types of openings. The Paine Lumber Company has continuously made these doors of the highest quality in keeping with the most modern advancements in materials and techniques to service these requirements and satisfy this demand.

### ADVANTAGES

#### Built to a Standard

All Paine solid core flush doors are made in accordance with Commercial Standard 171-50 plus many refinements and extras not set forth in this standard such as painstaking care in the hand-matching of face veneers and quality control at every stage of production, possible only in a large, experienced factory with adequate, up-to-date equipment.

#### Backed by Experience

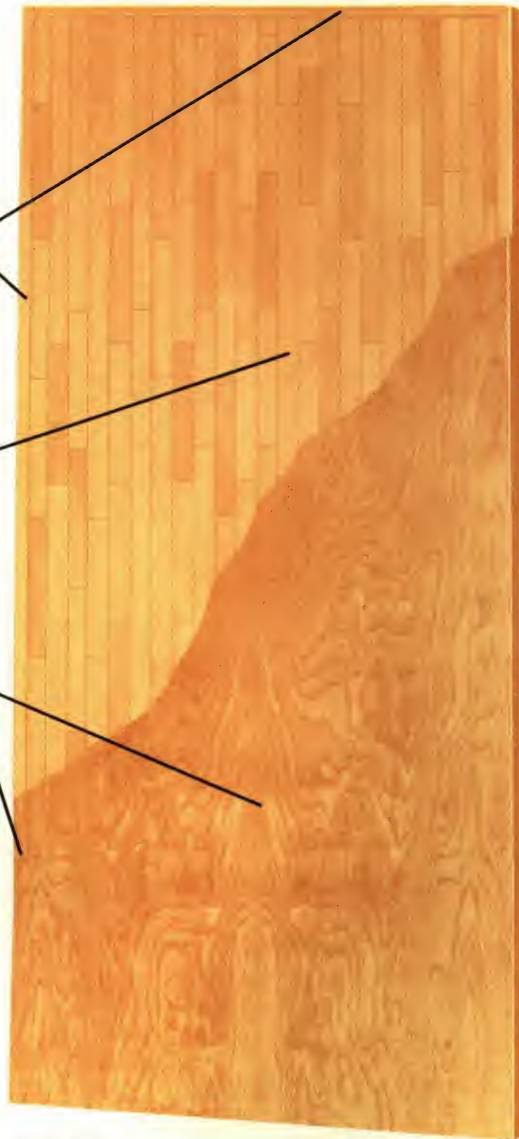
Having pioneered in the development of all types of flush doors, Paine craftsmen, through many generations, have acquired a technique for mass producing only the finest solid core flush doors. Research is carried on constantly and every new method of reaching for higher quality and dependability is applied to the Paine solid core flush door.

Full length softwood edge strips on all sides finish  $\frac{3}{4}$ " wide after trimming. Matching vertical edges finish not less than  $\frac{1}{2}$ " wide.

Built-up core of low density softwood blocks with grain running vertical and parallel and with end joints staggered.

Hand-matched face veneers of any commercially available species. Face and edges are sanded to a cabinetmaker's finish.

Glue throughout conforms to Commercial Standard 35-49 Type II — Water Resistant Bond, unless otherwise specified.



Solid flush door layout

## SPECIAL DOORS

Custom-built to meet your individual needs

Custom-building interior and exterior doors is a specialty of Paine craftsmen. Styles of doors with special lights, louvers and decorative designs are limited only by the imagination and are built with true cabinetmaker's technique.





## SPECIFICATIONS

	REZO	REZO	REZO	PAINE
	HOLLOW CORE INTERIOR	HOLLOW CORE EXTERIOR	HOLLOW CORE INSTITUTIONAL	SOLID CORE FLUSH DOOR
GENERAL	All doors shall be Paine REZO interior hollow core flush doors as manufactured by the Paine Lumber Company, Ltd., Oshkosh, Wisconsin.	All doors shall be Paine REZO exterior hollow core flush doors as manufactured by the Paine Lumber Company, Ltd., Oshkosh, Wisconsin.	All doors shall be Paine REZO institutional hollow core flush doors as manufactured by the Paine Lumber Company, Ltd., Oshkosh, Wisconsin.	All doors shall be Paine solid core flush doors as manufactured by Paine Lumber Company, Ltd., Oshkosh, Wisconsin.
CORE	Core shall consist of 2" x 4" grid type cells made by interlocked softwood slats notched for ventilation and mortised into a framework of stiles, rails and lock blocks.	Core shall consist of 2" x 2" grid type cells made by interlocked softwood slats notched for ventilation and mortised into a framework of stiles, rails and lock blocks.	Core shall consist of 2" x 2" grid type cells made by interlocked softwood slats notched for ventilation and mortised into a framework of stiles, rails and lock blocks. Two 3" cross rails provided at specified height for special hardware.	Core shall be constructed of softwood blocks laid up with grain running vertically and parallel and with end joints in adjacent rows staggered.
STILES	Stiles shall be softwood, 1 1/2" nominal width and notched to receive core gridwork. (Alt:) Matching hardwood vertical edge strip shall be laminated to the stile and finish not less than 1/2" after trimming.	Stiles shall be softwood, 3" nominal width and notched to receive core gridwork. (Alt:) Matching hardwood vertical edge strips shall be laminated to the stile and finish not less than 1/2" wide after trimming.	Stiles shall be softwood, 3" nominal width and notched to receive core gridwork. (Alt:) Matching hardwood edge strips shall be laminated to the stile and finish not less than 1/2" after trimming.	Stiles shall be softwood finishing no less than 3/4" wide after trimming. (Alt:) Matching hardwood edges shall be not less than 1/2" wide after trimming.
RAILS	Rails shall be 3" nominal width, grooved to receive core gridwork and notched for core ventilation.	Rails shall be 3" nominal width, grooved to receive core gridwork and notched where necessary for core ventilation.	Nominal width of one rail, 3"; the other, 5" both grooved to receive core gridwork and notched for core ventilation.	Top and bottom edge strips shall be of a low density softwood to match the core and finishing not less than 3/4" wide after trimming.
LOCK AREA	Lock area shall be 4 3/8" wide (incl. stile) and 20" long on 6'8" doors, centered on both sides. On doors over 6'8", lock area proportionately longer.	Lock area shall be 6 3/4" wide (incl. stile) and 24" long on 6'8" doors, centered on both sides. On doors over 6'8", lock area proportionately longer.	Lock area shall be 6 3/4" wide (incl. stile) centered on both sides and extending 21" from top and bottom of door.	
PANELS	Panels shall be 1/8" thick before sanding and consist of two or three plies of veneer, in accordance with Paine standards.	Panels shall be 1/8" thick before sanding and consist of three plies of veneer.	Panels shall be 1/8" thick before sanding and consist of three plies of veneer.	Face veneer shall be of the type specified with hardwood crossbanding of a complementary thickness.
ADHESIVES	Adhesives shall conform to CS 35-49 "Type II—Water Resistant Bond," unless otherwise specified.	Adhesives shall conform to CS 35-49 "Type II—Water Resistant Bond," unless otherwise specified.	Adhesives shall conform to CS 35-49 "Type II—Water Resistant Bond," unless otherwise specified.	Adhesives shall conform to CS 35-49 "Type II—Water Resistant Bond," unless otherwise specified.
SIZE	Doors shall be trimmed square and to exact, specified size.	Doors shall be trimmed square and to exact, specified size.	Doors shall be trimmed square and to exact, specified size.	Doors shall be trimmed square and to exact, specified size.
THICKNESS	Doors shall be of specified thickness with industry accepted tolerance of 1/16" under.	Doors shall be of specified thickness with industry accepted tolerance of 1/16" under.	Doors shall be of specified thickness with industry accepted tolerance of 1/16" under.	Doors shall be of specified thickness with industry accepted tolerance of 1/16" under.
FINISHING	Door faces shall be stroke sanded; stiles sanded, sharp edges eased; all surfaces prepared for painters' finish.	Door faces shall be stroke sanded; stiles sanded, sharp edges eased; all surfaces prepared for painters' finish.	Door faces shall be stroke sanded; stiles sanded, sharp edges eased; all surfaces prepared for painters' finish.	Door faces shall be stroke sanded; stiles sanded, sharp edges eased; all surfaces prepared for painters' finish.

**P A I N E**  
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